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1. A wind driven power generating device to be driven by an airflow, the device comprising:

a tube cluster comprising:

a central outlet tube having a narrowed center for channeling an upward flowing airflow;

a plurality of inlet tubes;

each inlet tube being defined by a cylindrical wall;

each inlet tube further having a collector end located at a distance from said central outlet tube, each inlet tube communicating with said central outlet tube for delivering airflow from said inlet tube collector end to said central outlet tube;

each collector end comprising a plurality of sails located adjacent to one another, a bottom end of each said individual sail extending along a curved boom; and the generating device further including a turbine in the outlet tube narrowed center to be driven by the airflow.

14. The wind driven power generating device according to claim 1, further comprising:

a plurality of wind collector assemblies, each wind collector assembly attached to a collector end of an inlet tube whereby a wind airflow is collected and redirected into said inlet tubes.

15. The wind driven power generating device according to claim 14, wherein each said wind collector assembly comprises:

a vertical mast;

a curved boom; and

a flexible sail connected at its top end to the mast and at its bottom end to the curved boom.

16. The wind driven power generating device according to claim 15, wherein each said wind collector assembly further comprises:

a steering sail for orienting said wind collector assembly with respect to an ambient airflow.

17. The wind driven power generating device according to claim 16, wherein each said wind collector assembly further comprises:

a tensioner connected to said curved boom and to said bottom end of said sail whereby wind loads on said sail can be managed.

18. The wind driven power generating device according to claim 17, wherein said tensioner comprises:

a spring-loaded drum;

a wound cable affixed on one end to said bottom end of said sail, and affixed on another end to said drum, said drum providing constant tension on said sail.

19. The wind driven power generating device according to claim 17, where in said tensioner comprises:

a counterbalance weight;

a cable affixed to one end to said bottom end of said sail and affixed on another end to said counterbalance weight, said counterbalance weight providing a constant tension on said sail.

20. The wind driven power generating device according to claim 16, wherein each said wind collector assembly further comprises:

a mechanism for reducing the area of the sail presented to the ambient wind airflow in response to a predetermined load on the sail.

21. The wind driven power generating device according to claim 18, wherein said mechanism for reducing the sail area comprises:

a collector loop slidably connected to said mast, said loop being movable downwardly along said mast in response to a predetermined load on said sail thereby substantially reducing the area of said sail presented to the ambient airflow.

22. The wind driven power generating device according to claim 1, wherein said tube cluster comprises a plurality of inlet tubes arranged in a staggered pattern.

23. The wind driven power generating device according to claim 1, wherein said wind driven power generating device further includes:  
heat radiating surfaces connected to said outlet tube.

a<sup>2</sup>  
24. A wind driven power generating device comprising:  
a tube having a narrowed center for channeling an airflow;  
a turbine in said narrowed center to be driven by the airflow;  
and a wind collector assembly comprising a vertical mast, a curved boom, and a flexible sail connected at its top end to said mast and at its bottom end to said boom, said wind collector assembly being attached to one end of said tube whereby an airflow is collected and redirected into said tube.

25. The wind driven power generating device according to claim 22, wherein said wind collector assembly further comprises:

a steering sail for orienting the wind collector assembly with respect to an ambient airflow.

26. The wind driven power generating device according to claim 23, wherein said wind collector assembly further comprises:

a tensioner affixed to said curved boom and to the bottom end of said sail whereby wind loads on the sail can be managed.

27. The wind driven power generating device according to claim 17, wherein said tensioner comprises:

a spring-loaded, damped drum;

a wound cable affixed on one end to said bottom end of said sail, and affixed on another end to said drum, said drum providing constant tension on said sail.

28. The wind driven power generating device according to claim 17, where in said tensioner comprises:

a counterbalance weight;

a cable affixed to one end to said bottom end of said sail, and affixed on another end to said counterbalance weight, said counterbalance weight providing a constant tension on said sail.

29. The wind driven power generating device according to claim 23, wherein each said wind collector assembly further comprises:

a mechanism for reducing the area of the sail presented to the ambient airflow in response to a predetermined load on the sail.

30. The wind driven power generating device according to claim 25, wherein said mechanism for reducing the sail area comprises:

a collector loop slidably connected to said mast, the loop being movable downwardly along said mast in response to a predetermined load on said sail thereby substantially reducing the area of said sail presented to the ambient

airflow.

31. A wind driven power generating device comprising:  
an outlet tube having a narrowed center for channeling an airflow;  
a turbine in said narrowed center to be driven by the airflow; and at least  
one inlet tube having a wind collector end, the inlet tube  
communicating with said outlet tube for delivering airflow from said  
inlet tube collector end to said outlet tube.

32. The wind driven power generating device according to claim 31,  
further comprising:  
a wind collector assembly attached to the collector end of each said inlet  
tube.

33. The wind driven power generating device according to claim 32,  
wherein each said wind collector assembly comprises:  
a vertical mast;  
a curved boom; and  
a flexible sail connected at its top end to the mast and at its bottom end to  
the boom.

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